

REQUEST FOR RECONSIDERATION

Rejection Under 35 U.S.C. § 103

The rejection of claims 1-22 under 35 U.S.C. 103(a) as obvious over Yamaguchi et al. (U.S. Patent No. 6,472,118) is respectfully traversed.

The Yamaguchi et al. reference does not describe or suggest a carrier comprising the carrier particles of the claimed invention. In particular, the reference does not indicate whatsoever that “the amount of the carrier particles having a particle diameter of less than 36  $\mu\text{m}$  is 90-100 wt% of the total of the particles,” as presently claimed, i.e., particles having a particle diameter of not less than 36  $\mu\text{m}$  are included in an amount of 10% by weight or less. Moreover, the presently claimed value for the number average particle diameter and the values of the other two particle diameter distributions are narrower than what is disclosed in the reference.

The Yamaguchi et al. reference generally describes a carrier for an image developer for electrophotography which comprising core particles, and a resin layer covering each of the core particles, in which the core particles have a weight average particle diameter of  $D_v$  (i.e., 25-45  $\mu\text{m}$ ); a number average particle diameter of  $D_p$  which meets with the condition:  $1 \leq D_v/D_p \leq 1.3$ . (See column 2, lines 1-10 and claim 1 of the reference). In addition, the amount of the core particles having a particle diameter of less than 22  $\mu\text{m}$  is no more than 7% by weight, and at least 70% by weight of the core particles have a particle diameter of less than 44  $\mu\text{m}$ . (See column 2, lines 12-16 and claim 1 of the reference).

In contrast, the claimed invention recites a carrier comprising magnetic core particles and a resin layer covering each of the core particles, in which the core particles have a weight average particle diameter of  $D_w$  which is 22-32  $\mu\text{m}$  and a number average particle diameter of  $D_p$  which meets with the following condition:  $1 \leq D_w/D_p \leq 1.20$ . (See present claim 1).

Moreover, the amount of the carrier particles having a particle diameter of less than 20  $\mu\text{m}$  is no more than 7 wt% of the total of the particles, and the amount of the carrier particles having a particle diameter of less than 44  $\mu\text{m}$  is 98-100 wt% of the total of the particles. (See present claim 1). Moreover, the amount of the carrier particles having a particle diameter of less than 36  $\mu\text{m}$  is 90-100 wt% of the total of the particles. (See present claim 1).

Applicants note that the disclosures of the reference and the present invention generally indicate that carrier deposition and image quality are improved with particle diameter distributions. (See column 3, lines 42-60 of the reference and the present specification at page 4, line 33 to page 5, line 6). However, other than hindsight of the present specification, there is no indication that it would be obvious to modify the reference to include the claimed *additional* particle diameter distribution, i.e., a particle diameter of less than 36  $\mu\text{m}$  is 90-100 wt% of the total of the particles. In particular, there is no suggestion that an additional particle diameter distribution would be necessary, and there is no evidence that such a distribution would improve carrier deposition and image quality. On the other hand, in the present specification, it is evident from the Comparative Examples, e.g. Comparative Examples 2-3, that excellent properties, such as uniformity of highlight, are not achieved without the presently claimed additional particle diameter distribution. (See Table 2, page 31 of the present specification). Therefore, the claimed invention is clearly novel and unobvious in view of the Yamaguchi et al. reference.

Accordingly, withdrawal of the rejection and reconsideration of the claimed invention is requested.

Obviousness-Type Double Patenting Rejection

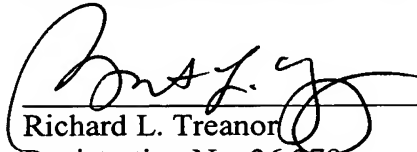
Applicants request that the provisional rejection of claims 1-22 for non-statutory obviousness double patenting over claims 1-22 of Yamaguchi et al. (U.S. Patent No. 6,743,558) be held in abeyance until patentable subject matter is indicated.

Applicants submit that the application is now in condition for allowance. Early notification of such allowance is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

  
Richard L. Treanor  
Registration No. 36,379

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 06/04)

Bryant L. Young  
Registration No. 49,073